WO 2004/065687 PCT/SE2004/000014

## Claims

1. A filter sector (1) for use in rotary disc filters for separating suspensions, the filter sector comprising a first filtration wall (2) of a substantially rigid net, and a second 5 filtration wall (3) of a substantially rigid net opposite the first filtration wall, a filtrate chamber (4) being formed between the first and second filtration walls for receiving filtrate that has flowed through the first and filtration walls, wherein the filtrations walls are profiled 10 to increase the filtration capacity of the filter sector, characterised in that each filtration wall (2,3) is profiled to form a multiplicity of cavities (5) and humps (6), and that each cavity and hump, respectively, includes a multiplicity of 15 meshes of the net.

2. A filter sector according to claim 1, wherein the cavities (5) and humps (6), respectively, are oriented in rows with the rows of cavities alternating with the rows of humps.

20

- 3. A filter sector according to claim 1 or 2, wherein the cavities (5) and humps (6) are formed by weaving the net.
- 4. A filter sector according to claim 1 or 2, wherein the cavities (5) and humps (6) are formed by pressing.
  - 5. A filter sector according to any one of claims 1-4, wherein each cavity (5) and hump (6), respectively, is defined by four straight sides.

30

6. A filter sector according to claim 5, wherein each straight side of a cavity (5) is common to one of the four straight sides of an adjacent hump (6).

WO 2004/065687 PCT/SE2004/000014

- 7. A filter sector according to any one of claims 1-6, wherein the first and second filtration walls (2,3) of the net take the shape of a bag.
- 8. A filter sector according to any one of claims 1-6, further comprising first and second support walls (8,9) made of a planar metal net that is coarser than the net of the filtration walls (2,3), wherein the first and second support walls support the first and second filtration walls, respectively.
  - 9. A filter sector according to claim 8, wherein the support walls (8,9) are joined to each other at the radial sides of the filter sector, whereby the filtration walls (2,3) and support walls (8,9) form a bag-shaped filter unit (10).
  - 10. A filter sector according to any one of claims 1-9, wherein the net of the filtration walls (2,3) comprises a metal net.

15